REMARKS

Claims 18-22 are allowed. The remaining claims are rejected as being unpatentable over U.S. Patent No. 4,778,985 to J. Everett Modisette, et al. In particular, Claims 1-5 and 7-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by the Modisette '985 patent, while Claim 6 is rejected under 35 U.S.C. § 103(a) as being obvious over the Modisette '985 patent.

Applicants' undersigned representative initially wishes to thank the Examiner for the time and consideration extended during telephone interview of August 9, 2006. As discussed, the device and method of Claims 1-17 are patentably distinct from the Modisette '985 patent since the Modisette '985 patent at least fails to teach or suggest displaying, in response to laser light scanned across a first side of a target plate, at least one infrared image on an opposed second side of the target plate with the at least one infrared image having portions at different respective temperatures. In order to further highlight patentable aspects of the claimed invention, independent Claims 1 and 17 have been amended as also discussed to recite that the at least one infrared image is an infrared thermal image having hotter and cooler portions at different respective temperatures. As discussed, the amendments to independent Claims 1 and 11 merely make explicit and clarify aspects of the claimed invention that have previously been implicit such that the amended claims do not raise new issues and should be substantively considered at this juncture. Based on the foregoing amendments and the following remarks, Applicants respectfully request reconsideration of the present application and allowance of the current set of claims.

In more detail, independent Claim 1 is directed to an infrared image generation device that includes a laser light source, at least one scanner that receives laser light and is capable of redirecting the laser light, a processor that controls operation of the scanner to generate an infrared image and a target plate that displays the infrared image. If desired, an infrared sensor could monitor the target plate so as to detect the infrared image displayed by the target plate. By determining if the infrared sensor does, in fact, detect the infrared image and, if so, in what manner the infrared sensor detects the infrared image, an infrared sensor can be tested in a cost-effective manner without having to test the infrared sensor in actual field conditions which

might, for example, involve the detection of the infrared signature generated by a missile or the like.

The target plate of the infrared image generation device of independent Claim 1 is defined to have a first side that receives the redirected laser light from the scanner and a second side, opposite the first side, that displays the infrared red image. In addition, the second side of the target plate of amended independent Claim 1 is now defined to display an infrared thermal image having hotter and cooler portions at different respective temperatures. Relative to the exemplary embodiment depicted in Figure 2, for example, the redirected laser light from the scanner can be received by the first side 23 of the target plate 18 and the resulting infrared image having portions at different respective temperatures can then be displayed by the second side 25 of the target plate.

The Modisette '985 patent describes an imaging plate structure designed to create an electrostatic image within a photoconductive layer in response to radiation. By thereafter subjecting the imaging plate structure to scanning radiation (different than the radiation that originally created the electrostatic image), the electrostatic image may be read out electronically with electrical signals being produced that are indicative of the electrostatic charge stored by that portion of the imaging plate structure currently being subjected to the scanning radiation.

In response to the arguments set forth in the prior Amendment that the Modisette '985 patent did not teach or suggest the display of an infrared image having portions at different temperature, the final Official Action disagrees and points to column 4, lines 46-50 of the Modisette '985 patent for its disclosure of the use of light of different wavelengths which represent correspondingly different temperatures. In conjunction with the light have different wavelengths, the Modisette '985 patent describes that the imaging plate structure may have a plurality of photoconductive layers, each responsive to a different band of wavelengths. By subjecting the imaging plate structure to light of different wavelengths, charge will be generated by the different photoconductive layers and migrate to interface between the photoconductive layers and the insulator layer. Thereafter, the cumulative charge at the interface between the photoconductive layers and the insulator layer can be read out from the imaging plate structure.

As discussed during the telephonic interview, although the electrostatic image may be generated by light of different wavelengths, the Modisette '985 patent does not teach or suggest a target plate that displays at least one infrared thermal image having hotter and cooler portions at different respective temperatures, as recited by amended independent Claim 1. Thus, the resulting image presented by the target plate of amended independent Claim 1 actually has hotter and cooler portions, as required in order to test an infrared sensor. In contrast, the resulting image generated by the imaging plate structure of the Modisette '985 patent is electrostatic and, as such, is not an infrared thermal image having hotter and cooler portions at different respective temperatures, regardless of whether the charge that defines the resulting electrostatic image is generated by light of a single wavelength or multiple wavelengths.

In contrast to the Modisette '985 patent, the infrared image generation device of amended independent Claim 1 displays the resulting infrared image having portions of different respective temperatures on its second side, opposite the side from which the target plate is scanned. As noted above, the Modisette '985 patent does not display an infrared image of the type defined by amended independent Claim 1 on either side of the imaging plate structure. Moreover, even the electrostatic image generated by the imaging plate structure is not described to be on or at the side that is opposed to the side that receives the input. Instead, the charge is described by the Modisette '985 patent to migrate toward the same side from which the original illumination was received.

In an analogous manner, independent Claim 11 is directed to a method for generating an infrared image that includes providing laser light, scanning the laser light across a first side of a target plate and displaying at least one infrared image on a second side of the target plate, opposite the first side, in response to the laser light that has been scanned thereacross. As now further recited by amended independent Claim 11, the display of the at least one infrared image includes the display of an infrared thermal image having hotter and cooler portions at different respective temperatures. As described above in conjunction with amended independent Claim 1, the Modisette '985 patent does not teach or suggest the display of any type of infrared thermal image having hotter and cooler portions at different respective temperatures as further recited by amended independent Claim 11. Moreover, the Modisette '985 patent does not teach or suggest

the display of an infrared thermal image on a second side of the target plate opposite the side across which laser light has been scanned.

For each of the foregoing reasons, amended independent Claims 1 and 11, as well as the claims that depend therefrom, are not taught or suggested by the Modisette '985 patent. Accordingly, the rejections of independent Claims 1 and 11, as well as the claims that depend therefrom, are overcome.

CONCLUSION

In view of the amendments and remarks presented above, it is respectfully submitted that all of the claims of the present application are in condition for immediate allowance. We therefore respectfully request that a Notice of Allowance be issued. The Examiner is encouraged to contact the Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application. It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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